An Exploratory Study to Check the Impact of COVID-19 on Investment Decision of Individual Investors in Emerging Stock Market

by

Aamir Sohail

Fellow of Ph D, Lecturer Commerce, University of Sargodha, Sub-Campus Bhakkar, Pakistan Email: aamir.sohail@uos.edu.pk

Abid Hussain¹

Fellow of Ph D, Department of Public Administration, Gomal University, D. I. Khan, Pakistan Email: abidhussainabid35@gmail.com

Dr Qamar Afaq Qurashi

Assistant Professor, Department of Public Administration, Gomal University, D. I. Khan, Pakistan

Email: qamarafaq1@gmail.com

Abstract

The purpose of this research study is to find out the factors affecting individual investor's investment behavior in the age of COVID-19 by using a qualitative research method analysis. The population of the study consists of individual investors investing in Pakistan Stock Exchange. The purposive sampling technique was used by the researchers. Semi-structured interviews were conducted in order to get thorough insights from respondents. Electronic means were used to access the respondents. The interviews lasted between 15 to 25 minutes. Thematic analysis was used in this study. For similarities and differences in themes, the content analysis technique was implemented. The outcomes revealed that COVID-19's impact on individual investor's investment decisions trading in PSX. The overall market factors are the most important factors, and psychological factors are the least influencing factors affecting an individual investor's investment decision. More specifically the study findings showed that market volatility, investors' confidence, Govt policies, political stability, brokers advice, herding, and financial returns are the most considerable factors but religious beliefs, social status, and opinion of family members are the least influencing factors for the stock selection process of individual investors. This research study is limited to individual investors as it does not include institutional and professional investors.

Keywords: Individual Investors, Investment decision, Pakistan Stock Exchange, Organizational, Personal and Market Factors

Introduction:

Prospect theory is a behavioral financial theory that covers decisions between alternatives that include risk, in which the probability of an outcome is known. The theory explains that investors make decisions based on potential estimates of profit and loss rather than final results.

¹ Corresponding author

In addition, from the perspective of potential theoreticians, investors evaluate links to the basic principles of behavior. They found that behavioral factors depend on the use of heuristic methods for losses and profits (Kahneman, 1979). The field of behavioral finance is a very broad and different way to investigate the intentions of investors in different investment avenues (Mak & Ip, 2017).

Individual investors are those who purchase securities for his/her own behalf. They trade in smaller amounts and actively involved in stock market activities. It is difficult for small investors to process financial information. Retail investors face more issues while making rational or accurate decisions in contrast to funding managers. They do not contain all relevant data and access to official information for rapid, rational, or logical decision-making for the investment process (Lu, 2010) so, they make rushed decisions.

Ahmad (2017) argued that organizational and market factors are majorly changing the investor's behavior and the impact of personal factors on investment decisions is lower than the other two factors. Hussain (2012) recognizes that organizational particular qualities such as net assets and accounting information are crucial factors for investment decision making. Azam and Kumar (2011) examined variables that influence investor behavior by conducting research. According to the results of the survey, the growth rate of earning per share, foreign direct investment, and the gross domestic product is the main link and has a significant influence on the price of companies listed on the KSE (Caracas Stock Exchange).

Making investment decisions in uncertainty, particularly stock decisions, is a tough decision. Obviously, it represents the decision of several alternative stocks in light of the information collected and analyzed (Nofsinger, 2014). Neoclassical finance and behavioral finance are different as previously it is to assume that the financial agent is rational and that the capital market is perfect (McMahon, 2006), and that all are affected by psychological predispositions (Nofsinger, 2014). He additionally clarified that most of the investors who are well aware of the behavior in finance will acknowledge neoclassical financial instruments before making investment choices. Although from an academic point of view, the above arguments are still valid, stock investment decisions are made in anticipation of the future, and agreements are concluded by other professions or organizational environments.

The COVID-19 continues to hit the world economy as well as the financial markets. As a result of the coronavirus spread across all continents, the majority of the investors face their portfolios painted in red ink, even though there are still opportunities to gain from the current pandemic situation. The traditional investment strategies have been well studied and well documented during economic booming. However, few research papers aimed at determining investment strategies during pandemic times. Few studies have adopted an exploratory approach to investigate investor behavior (Jaiyeoba and Haron, 2016; Massironi and Guicciardi, 2011). In fact, a detailed literature review shows that few studies available which check the COVID-19 impact on retail investor's behavior especially in emerging stock markets like PSX. This study addresses the gap by applying an interpretive approach to the investment behavior of retail investors.

Research Objectives:

The major objective of the study was to investigate the factors affecting investors investment decisions in PSX during COVID-19 while the sub-objectives were as under:

i. Find out investors' psychosomatic biases affecting individual investor behavior.

- ii. Find out investors' experience affecting individual investor behavior during COVID-19.
- iii. Ascertain the market factors affecting individual investor behavior during COVID-19.

Empirical Studies on Investors Behavior:

Finance is considered as the lifeblood of an economy and organization. So, decisions relating to finance are very much important especially while investing in the stock market because the level of uncertainty is very high about future outcomes. In traditional finance, investors are considered as rational. Efficient market hypothesis theory which is presented by Fama (1965), describes that investors are rational, they make error-free decisions, securities are always efficiently and fairly priced, and have homogenous expectations with regard to securities. Behavior finance is a new paradigm in the world of finance. For the psychological decision process, it pursues to understand and forecast the systematic financial market implications. It mainly deals with applications of psychological and economic situations for accurate financial decision making (Olsen, 1998). There are so many market anomalies that cannot be explained and managed with the help of traditional finance theories. These anomalies can be addressed through behavioral finance theories.

Statman (2011) argues that investor's decisions of investment are essentially dictated by investors' demand. For example, investors require an outstanding rate of profitability, they expect wealth and delight when they resign, they have to trade the market, they want to be proud of the returns of their investment, and finally, they want to be successful in their own country. Therefore, according to Statman, all this behavior shows the real reasons for the rise and fall of the price of the financial markets. In the meantime, investors realized that individual investors who are directly involved in the stock exchange are very rare as compare to institutional investors who are actually dominating the stock market.

Different companies issue financial statements in order to provide financial information to stakeholders and investors. This financial information has a significant impact on investors' decisions of investment (Hillenbrand & Schmelzer, 2017). Some other researchers examine different qualities of personality that can affect investors' behavior. The research findings of this study indicate that tension and problems in the relationship with other investors and businesses are the major factors affecting investors' behavior (Bucciol & Zarri, 2017). One study is conducted on the topic of the relationship between herding behavior and the attitude of wine investors. The findings of this study suggest that external herding factors influence the behavior of wine investors (Aytaç et al., 2017).

Hossain and Nasrin (2012) in a study of Bangladesh concluded that the eight most important factors influencing investor retention are company-specific attributes/reputation, net asset value, accounting information, business opportunities, publicity, the owner structure, influence of people, and personal finance needs. One researcher found that high-risk investors are investing more inequities in order to earn high returns (Hoffmann et al., 2015). The findings of one research suggest that broker recommendations and friends' opinions are major while family member opinion is the least considerable factor for investors (Ahmad, 2017). Risk tolerance and investment decisions have a positive relationship. The risk factor slows down the speed of the investors in the financial planning and investment management (Grable & Lytton, 1999).

Investors tend to rely on stock market information to make investment decisions. Changes in stock prices can affect investor behavior (Waweru et al., 2008a). Shafi (2014) discusses the

importance of coverage of press, and Government authorities Information are very crucial factors for decision making of the investment. Factors influencing investor stock market decisions include price fluctuation, market, and political uncertainty, and organizational internal factors (Waweru, et al., 2008b). Experience of different investment channels and their own findings guide the investors to choose the best stock (Babatunde & Razali, 2016). Different internet business activities share by investors with other investors interested in similar trading activities. This information has greatly influenced the behavior of investors (Ackert et al., 2016). Some other researchers studied this particular topic and suggested that strong religious beliefs have a significant impact (Lein, Turk, & Weill, 2017).

Merika (2016) believes that economic factors are affected by the overall trends of the market at the time of the survey. Proper understanding of the financial and economic condition of the country can enhance better investment decision-making (Babatunde & Razali, 2016). Maini (2017) explains that unpredictable prices of market area major factor affecting individual investor's decisions. Due to a lack of information objectivity and enough financial experts, most decisions of the Tehran Stock Exchange are based on political and psychological factors.

Methodology:

Qualitative data refers to words rather than numbers (Bryman, 2008), and is often used in situations where fewer people need a deeper and clear understanding of a particular topic (Veal, 2006). At this stage, words are processed based on the data collected in the semi-structured interview. Since the scope and concepts of the research are well known, qualitative data were collected through semi-structured interviews. According to the target sample, 10 participants were selected from the Pakistan Stock Exchange. The demographics of the respondents are described in the next section.

The population of the study consists of individual investors investing in PSX. The purposive sampling technique was used by the researcher. Semi-structured interviews were conducted. Google Doc was used for asking respondents responses electronically because due to the current situation it is very hard to visit physically. Moreover, telephonic interviews were also conducted according to the feasibility of the respondents. The interview lasted 15 to 25 minutes. The sound was recorded and the researchers made additional notes. Finally, the researchers asked the respondents to share the findings with them and send them a copy of the transcript for verification electronically.

Thematic analysis is used in this study as at beginning data shortening interviews were practiced, in order to get the interviewer ready for data collection procedure: for similarities and differences in themes content analysis technique was implemented (Miles et al., 2014). This was organized by conveying codes to theme and classifications as patterns, topics, ideas, and concepts. Second phase: data exhibits, in this case, reports or themes are discoursed one by one and maintained them with exact citations (Jaiyeoba & Haron, 2016; Zakaria, 2015; Orobia & Musinguzi, 2013). In the final phase: illustrating and authenticating the conclusion, in this stage, the crux depicted based on the above-stated outcomes (Lincoln & Guba, 1985).

Sample Characteristics:

The interview was conducted with ten individual investors on the Pakistan Stock Exchange and identified various factors that could affect investment decisions. None of these investors have less than one year of investment experience. All respondents are male and Pakistani and currently

investing in PSX. All the respondents have degrees relevant to business administration. All the respondents have good knowledge of the stock market.

Table: 1 Demographic Information of interviewees

Interviewees	Experience	Gender	Age	Investment status	Education	Investment in more than two assets
S01	8	Male	44	Current Investor	Master	Yes
S02	9	Male	29	Current Investor	Master	Yes
S03	5	Male	33	Current Investor	M.Phil.	Yes
S04	8	Male	40	Current Investor	Masters	Yes
S05	10	Male	33	Current Investor	MBA	Yes
S06	6	Male	29	Current Investor	ACMA	Yes
S07	8	Female	35	Current Investor	PHD	Yes
S08	9	Female	33	Current Investor	CA	Yes
S09	10	Female	32	Current Investor	MBA	Yes
S010	9	Male	45	Current Investor	ACCA/MBA	Yes

Psychological biases affecting individual investor behavior:

Investors are interested to find out those major factors which are crucial for their investment decisions as previous results from Babatunde and Razali (2016) indicate that the investment decisions of individual investors are influenced by various psychological, factors. Investor's information is a very important factor which affects their decision especially in the age of COVID-19, the interview responses are as follows:

"People do not have initial knowledge and skills to use the available information gathered from different sources to make investment decisions. People always look for information available on the internet or on PSX sites which affect their decisions. However, it is difficult to check the accuracy of information as the official information released is not fully built" (Interviewee No. 1).

"I often take investment decisions due to the effect of rumors, going on in the market" (Interviewee No. 3).

"Usually investors are affected by the available information related to investment decisions. I also use information from investment analysis meetings and consultants as a reference to investment decisions" (Interviewee No. 4).

According to different investors, profit is not the only reason for investing stock in PSX but different other points are also crucial for investment decision.

"I invest in the stock market to earn dividends and make a considerable share in the market" (Interviewee No. 2).

"I invest in the stock market to manage my portfolio better and gain a certain social status" (Interviewee No. 4).

Investors expresses their views in the context risk and return. According to him calculated risk gives him more profit. That's the major reason of investing in stock market. The following responses clearly show these points:

"Usually, I want to get a high return on investment. I know that more risk generates more chances of high earnings. So, I decided to invest in the Pakistani stock market because I have a great chance

of getting profit from this market as I like to invest in stocks through brokers from those companies' stocks whose predictions of high prices are more in future" (Interviewee No. 6).

"The stock market and real estate are the biggest asset creators of the past. It is really easy to invest in the stock market rather than the real estate sector, so I chose this option to invest" (Interviewee No. 7).

Risk is an important factor for investors to consider when making investment decisions. There are two types of investors in the market. Through the different respondents' views, it shows that all respondents are ready to take risk. The above statement confirms through these responses from interviews:

"Before investing, I questioned the risks and analyzed the measures that can be achieved through venture capital" (Interviewee No. 4).

"I believe risky assets can cause significant losses so, invest in a diversified portfolio to minimize a risk of loss" (Interviewee No. 2).

Personal financial need and herding are also a very important factor which was identified in the process of interviewing from various investors. It is important to consider this factor as previous literature points out that personal finance needs to change the decision of individual investors (Bucciol & Zarri, 2017). Different investors express their views in the following ways:

"Well, if I am satisfied with the broker, entering the stock market and selling stocks, it will naturally have a positive impact on my investment behavior but some time I make my decision on the basis of other investors influence on one particular companies shares" (Interviewee No. 2).

"For most investors, especially retail investors, it is difficult to obtain accurate market data, so most investors may want to consider carefully attracting information to change their investment behavior, thus promoting the development of the stock trading system" (Interviewee No. 7).

Consultation is another important factor identified during the interviews. The respondent's responses clearly indicate that most of the respondents found a large number of results from their primary research and carefully read the organization related news in different journals and newspaper etc. The following lines clearly show the view of different investors regarding consultation:

"During COVID-19 situation, still think about my own experience, and it's hard for me to trust others, including my friends and family" (Interviewee No. 2).

"Overall, whenever I make an investment decision, I will consider the broker's advice because the advice should be coming from their side, they gave us written reports, and so we didn't burn our finger" (Interviewee No. 7).

In the end, the interviews believes that the religious belief, social status and family members' advices are not the influencing factors during the current situation:

"Religious beliefs and social status are not considerable factor for me as I invest in those companies which are giving higher return" (Interviewee No. 10).

Investors consider the psychological biases less because they have a lack of understanding about such biases. They follow the rule of thumb while making investment decisions as they have

no reliable information and are not able to conduct technical analysis. So they are unable to alleviate such biases. Heuristic simplification is opposed to an analytical system which is performed to calculate probability in a logical manner (Strahilevitz, Odean, & Barber, 2011).

Investors experience affecting individual investor behavior during COVID-19:

This theme discusses the experience of stock market investors and how their experiences would affect their prospects to remain active in the Pakistan stock market. Knowing investors' personal investment experiences is particularly important since this will go a long way in shaping their future involvement in the stock market (Strahilevitz, Odean, & Barber, 2011). The following experiences are illustrated by the respondent as retail investors and fund managers:

"Yes, of course, Market faces ups and downs; even when the market is up we still have some stocks losing, and when the market is down we still find some stocks rising. So, the role of the fund manager is to manage market risk and stock risks" (Interviewee No. 1).

"Yes, I will continue because I still believe that in the long-run, investment in the Pakistan stock market gives the highest rates of returns. My experience in the stock market is about ups and downs. As you know, investment in equity involves risk, whenever we talk about risk, there will be good and bad times. Investment in trading involves less risk, and get the return within less time. So, there are times that you make decisions and resulted in good time and there are times that it does not go in that way" (Interviewee No. 2).

"Investors have not too many experiences. Many investors have enough knowledge to analyze the whole picture of the Pakistani economy. Normally, I would invest in blue-chip stock as their earning per share is high" (Interviewee No. 4).

Some interviewers express that during COVID-19, investors' experience is a very important factor affecting Investors decision. Investors having good experience in the market are taking their decision wisely by investing in blue-chip companies. During the current situation, investors are reluctant to invest heavily in PSX but they want to continue their investing activities. The following are the responses of the investors in this regard:

"Investment inequity is a long-term process; one can take return after a certain period. I usually prefer to invest in trading whether in daily, weekly or monthly shares for the sake to make a return as quickly as possible" (Interviewee No. 8).

"Averagely, I take good advantage but sometimes I expressed with high return, and sometimes I expressed loss but after every profit/loss activity my experience increases" (Interviewee No. 7).

"It's all about challenging! Ups and downs prevail in the stock market. I need to continue my investing activities by carefully considering my portfolio" (Interviewee No. 6).

"One time I make profit another time I suffer loss" (Interviewee No. 9).

In conclusion, investors are heavily relaying on their experience especially, in the current situation. Investors are taking their decision on the basis of previous experience.

Market Factors Affecting Investment Decision:

In this interview section, there are some factors in the market that can influence investment decisions. Companies with different market strategies have a great influence on investment

decisions for investors. These factors are really important to consider by the investor's because information of different market situation is vital for the investment decision making process. Different investors give their opinion about the market information importance in the following phrases:

"Market information is the basis for getting investment, which is why I have been thinking about it all the time" (Interviewee No. 1).

"Pakistan's stock market is an unstable market, which is why stock prices change very quickly, so I always turn to brokers to let me know the latest developments in price volatility" (Interviewee No.

"Price changes, market information such as the company's brand image will affect my investment decisions" (Interviewee No.5).

Previous market trends of companies are also relevant factors for investors to consider. Some interviews show their experiences in the following lines:

"Because oil prices and commodities are affected by fluctuations in international markets, information about domestic and international markets is effective" (Interview No. 9).

"Before investing in the market, I will analyze the preferences of corporate preferences" (Interviewee No. 7).

Uncertainty of the market, either economic or political, negatively impacts the decisionmaking process of investors. Investors should consider this important factor before making an investment decision because when the market is uncertain, the company's stock price will fall rapidly and investors may face huge losses. Different respondent's views about market uncertainty are as follow:

"When money is threatened by profits, there is a sense of insecurity, and when new threats (such as terrorism or recession) occur, this insecurity will increase radically because organizations will never accurately predict future income" (Interviewee No. 2).

"The affiliation of political parties has influenced my investment decisions" (Interviewee No. 5).

"Uncertainty itself will affect the economy to a large extent." The smaller scope of uncertainty focuses on the expected impact of individual organizations in the economy in the face of war threats. Failure and the prospect of major insecurity will affect the entire economy' (Interviewee No. 3).

"Uncertainty comes from an incomplete understanding of market behavior that has an impact on the decision-making process" (Interviewee No. 4).

Discussion:

The results of this study show that economic and political factors are the most important factors affecting individual investors in Pakistan. It is consistent with previous studies (Chandra & Kumar, 2011). Sara (2017) also found that there are different factors affecting PSX retail investors' decisions which include; political, environmental, innovative social, and legal factors.

The findings of the study indicate that investors' experience is a key factor that is affecting stock investors' behavior. Past research support researcher findings as one of the researcher findings show that investor's previous experiences influence their further participation in the stock market (Strahilevitz et al., 2011). Following past experiences and relying upon the information provided by expert analysts, individual investors are influenced by herding bias in a negative sense.

The results of the study also show that risk is an important factor affecting the behavior of individual investors. However, some researchers' observations are not consistent with the current study results. Sultana and Pardhasaradhi (2010) and in addition Chou et al., (2010) research on Taiwan investors and they observed that personal investment experience can change the concept of risk.

As a result of the present research, religious beliefs have proven to be one of the least significant factors affecting individual investment decisions. This result is consistent with the study of Hussein and Hassan (2006) on the UAE market. In addition, social status is not an important factor for investors. Chong and Lai (2011) found that social status is a more considerable factor for female rather than male investors.

Similarly, the results of the current study show that advice of the friends and family members' opinion is not so important, but the recommendations from stockbrokers are considered an important factor affecting the behavior of individual investors. The findings of this result are consistent with Hussein and Hassan (2006) in the United Arab Emirates market. However, these finding negates the results of Merikas et al. (2000) and Chong and Lai (2011) study in Malaysian investors.

Conclusion:

The findings of this research study shows that economic and political stability are the most considerable factors for stock selection process. The results also show that market factors and personal factors are the most important factors influencing individual investor's decisions. Furthermore, results of the study also show that during COVID-19 investors are carefully investing in the market by relaying on their own experience and broker advices. The results also showed that religious beliefs, social status, "getting rich quickly" and opinion of family members have not affected on equity decisions.

Practical and Theoretical Implication:

This research will be able to provide new insights for investors, brokerage firms, management, corporate governance and government, helping them make appropriate and powerful decisions and eventually stabilize the market. The contribution of the study to the theory is twofold. First, this study aims to improve our insight and understanding of the relationship between behavioral factors and investor decisions. Secondly, researcher also uses a holistic approach to study internal and external factors in the meantime.

Research Imitation and Future Direction:

The period and sample size of the study are limited. This research study is limited to individual investors as it does not include institutional and professional investors. Triangulation method may be used in future study.

References

- Ackert, Lucy, Jiang, & Liu. (2016). Influential investors in online stock forums. *International Review of Financial Analysis*, 45(Supplement C), 39-46
- Ahmad. (2017). Factors Influencing Individual Investors' Behavior: An Empirical Study of Pakistan Financial Markets. *J Bus Fin Aff*, 6 (297). doi:10.4172/2167-0234.1000297
- Ahmad, S. (2017). Factors Influencing Individual Investors' Behavior: An Empirical Study of Pakistan Financial Markets. *Journal of Business & Financial Affairs*, 6(4). doi:10.4172/2167-0234.1000297
- Alin, L. (2019). The Impact of Industrial Revolution to Market. Electronic Research Journal of Social Sciences and Humanities 1 (IV), pp. 114-122
- Al-Obaidi, A. Q. H. (2020). Exploring Factors that Impact the Process of Reducing Production Cost of an Iraqi Company in the Manufacture and Marketing of Dates. Electronic Research Journal of Social Sciences and Humanities 2 (III), 153-164
- Aytaç, B., Coqueret, G., & Mandou, C. (2017). Herding behavior among wine investors. *Economic Modelling*. doi:https://doi.org/10.1016/j.econmod.2017.07.022
- Azam, M., & Kumar, D. (2011). Factors Influencing the Individual Investor and Stock Price Variation: Evidence from Karachi Stock Exchange. *Australian Journal of Basic and Applied Sciences*, 5(12), 3040-3043.
- Babatunde, J. H., & Razali, H. (2016). A qualitative inquiry into the investment decision behaviour of the Malaysian stock market investors. *Qualitative Research in Financial Markets*, 8(3), 246-267. doi:doi:10.1108/QRFM-07-2015-0027
- Baloch, U., Rehman, N. A. (2019). An Empirical study of Bi-Directional Relationship of Exchange Rates with Stock Market Returns an Evidence from South Asian Emerging Economies: An Econometric Analysis. Electronic Research Journal of Social Sciences and Humanities 1 (IV), pp. 34-57
- Bucciol, A., & Zarri, L. (2017). Do personality traits influence investors' portfolios? *Journal of Behavioral and Experimental Economics*, 68(Supplement C), 1-12. doi:https://doi.org/10.1016/j.socec.2017.03.001
- Chandra, A., & Kumar, R. (2011). Determinants of Individual Investor Behaviour: An Orthogonal Linear Transformation Approach. *Munich Personal RePEc Archive*. doi:https://mpra.ub.uni-muenchen.de/29722/
- Chong, T.-P., & Lai, M.-M. (2011). An empirical evidence of factors in equity selection process in Malaysia *African Journal of Business Management*, 5(15), 6221-6232.

- Hillenbrand, A., & Schmelzer, A. (2017). Beyond information: Disclosure, distracted attention, and investor behavior. *Journal of Behavioral and Experimental Finance*. doi:https://doi.org/10.1016/j.jbef.2017.08.002
- Hoffmann, A. O. I., Post, T., & Pennings, J. M. E. (2015). How Investor Perceptions Drive Actual Trading and Risk-Taking Behavior. *Journal of Behavioral Finance*, 16(1), 94-103
- Hossain, & Nasrin. (2012). Factors Affecting Selection of Equity Shares: The Case of Retail Investors in Bangladesh. *European Journal of Business and Management*, 4(20), 110 124.
- Hussain, M. (2012). The Impact of Macroeconomic Variables on Stock Prices. The Business Review, 4 (2), 22-32
- Hussein, A. H. (2006). Factors influencing individual investor behavior: an empirical study of the UAE financial markets. *The Business Review*, 5(2), 225-232
- Jaiyeoba, & Haron, J. (2016). A qualitative inquiry into the investment decision behaviour of the Malaysian stock market investors. *Qualitative Research in Financial Markets*, 8(3), 246–267.
- Joan, J., & Thomas, B. (2010). The demographic profile of socially responsible investors. *Managerial Finance*, 36(6), 474-481
- John Grable, & Lytton, R. (1999). Financial risk tolerance revisited: the development of a risk assessment instrument. *Financial Services Review*, 8, 161-181.
- Kahneman. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263-291
- Lein, Turk, & Weill. (2017). Religiosity vs. well-being effects on investor behavior. *Journal of Economic Behavior and Organization*, 138, 50-62. doi:10.1016/j.jebo.2017.04.009
- Lincoln, & Guba, L. (1985). *Naturalistic Inquiry*, 1sted. Sage Publications, Newbury Park, CA.
- Lu, L. (2010). Asset Pricing and Welfare Analysis with Bounded Rational Investors. *The Financial Review*, 45, No. 2, 485-499
- Maini, N. (2017). Perceptions of Women Investors in Relation to Stock Market. *Management and Labour Studies*. 2, 8-18
- Mak, M. K. Y., & Ip, W. H. (2017). An exploratory study of investment behaviour of investors. *International journal of Engineering Business Management*, 9, 1-8
- McMahon. (2006). Behavioural finance: a backround briefing. *School of Commerce Research Paper Series*, 5-9. Retrieved from www.flinders.edu.au/sabs/business/research/papers/05-9.pdf

- Merika, A. (2016). Evaluating volatility dynamics and the forecasting ability of Markov switching models. *Journal of Forecasting*, 28(8), 736-744
- Merikas, Merikas, Vozikis, & Prasad. (2000). Economic Factors and Individual Investor Behaviour; The Case of the Greek Stock Exchange. *Journal Applied Business Research*, 20, 26-34.
- Miles, M., Huberman, M., & Saldana, J. (2014). *Qualitative Data Analysis: An Expanded Sourcebook*, 3rd ed. Sage Publications, Thousand Oaks, CA.
- Nofsinger. (2014). The Psychology of Investing (5th ed.): Pearson Education, New Jersey.
- Olsen. (1998). Are investors reluctant to realize their losses? *The Journal of Finance* 53, 1775–1798.
- Orobia, L. A., Byabashaija, W., Munene, J.C., Sejjaaka, S.K., & Musinguzi, D. (2013). "How do small business owners manage working capital in an emerging economy? A qualitative inquiry." *Qualitative Research in Accounting & Management*, 10 No. 2, 127-143.
- Sansa, N. A. (2019). Critical Analysis of the Credit Market Development Effects to the Economic Growth: Evidence from Tanzania. *Electronic Research Journal of Social Sciences and Humanities* 1 (IV), pp. 164-175
- Sansa, N. A. (2020). The Impact of COVID -19 On Financial Markets: Evidence from China and USA. Electronic Research Journal of Social Sciences and Humanities 2 (II), pp. 29-39
- Sara, J., Inga-Lill, S., & Mats, W. (2017). An investigation of the impact of financial literacy, risk attitude, and saving motives on the attenuation of mutual fund investors' disposition bias. *Managerial Finance*, 43 (3), 282-298. doi:10.1108/MF-10-2015-0269
- Shafi. (2014). Determinants influencing individual investor behavior. *Arabian Journal of Business and Management*, 2, 61–71. Retrieved from http://arabianjbmr.com/
- Statman, M. (2011). What Investors Really Want: Discover What Drives Investor Behaviour and Makes Smarter Financial Decisions (1st ed.). New York: McGraw-Hill, , NY.
- Strahilevitz, M. A., Odean, T., & Barber, B. M. (2011). "Once burned, twice shy: how Naive learning, counterfactuals, and regret affect the repurchase of stocks previously sold". *Journal of Marketing Research*, 48, pp., S102-S120.
- Sultana. (2010). An Empirical Study of Indian Individual Investors behavior. *Global Journal of Financial Management*, 2, 19-33.
- Waweru, Munyoki, & Uliana. (2008a). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1), 24-41. doi: https://doi.org/10.1504/IJBEM.2008.019243

Waweru, Munyoki, & Uliana. (2008b). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1), 24-41. doi:https://doi.org/10.1504/IJBEM.2008.019243

Zakaria, Z. (2015). Acultural approach of embedding KPIs into organisational practices. *International Journal of Productivity and Performance Management*, 64 No. 7, 932-946